

FACILITY NAME AND PERMIT NUMBER: VA0020202

Virginia Corr. Ct. for Women

Form Approved 1/14/99
OMB Number 2040-0086

FORM
2A
NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - 1. Has a design flow rate greater than or equal to 1mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

Virginia Corr. Ct. for Women**BASIC APPLICATION INFORMATION****PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:**

All treatment works must complete questions A.1 through A.8 of this Basic Application Information Packet.

A.1. Facility Information.

Facility Name Virginia Correctional Center for Women
Mailing Address State Farm
State Farm, VA 23160
Contact Person Steve Spence
Title Environmental Services Unit Manager
Telephone Number (434) 767-5543 Ext. 5319
Facility Address (not P.O. Box) 2841 River Road West
Goochland, VA 23063

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant Name Virginia Department of Corrections
Mailing Address 6900 Atmore Drive
Richmond, VA 23225
Contact Person Tim Newton
Title Environmental Services Unit Director
Telephone Number (804) 887-8069

Is the applicant the owner or operator (or both) of the treatment works?

☒ owner ☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☐ facility ☒ applicant**A.3. Existing Environmental Permits.** Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

| | | | |
|-------|------------------|-------|-------|
| NPDES | <u>VA0020702</u> | PSD | _____ |
| UIC | _____ | Other | _____ |
| RCRA | _____ | Other | _____ |

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

| Name | Population Served | Type of Collection System | Ownership |
|-------------------------------------|-------------------|--------------------------------|------------|
| <u>VCCW</u> | <u>385</u> | <u>separate sanitary sewer</u> | <u>DOC</u> |
| <u>Goochland</u> | <u>1300</u> | _____ | _____ |
| _____ | _____ | _____ | _____ |
| Total population served <u>1685</u> | | | |

A.5. Indian Country.

- ☐
- Yes
- ☒
- No

- ☐
- Yes
- ☒
- No

a. Design flow rate .300 mgd

This Year

- C. Maximum daily flow rate

☒ Separate sanitary sewer

100 %

- ☐
- Combined storm and sanitary sewer

| | % |
|----------------------------------|-----|
| ...to the same person or persons | 60 |
| ...to different persons | 40 |
| Total | 100 |

a. Does the treatment works discharge effluent to waters of the U.S.?

- ☒
- Yes
- ☐
- No

If yes, list how many of each of the following types of discharge points the treatment works uses:

- i. Discharges of treated effluent

1 _____

- ii. Discharges of untreated or partially treated effluent

0

- ### iii. Combined sewer overflow points

0

- iv. Constructed emergency overflows (prior to the headworks)

0

- Other

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? ☐ Yes

- ☐
- Yes
- ☒
- No

If yes, provide the following for each surface impoundment:

Location:

Annual average daily volume discharge to surface impoundment(s)

mgd

Is discharge ☐ continuous or ☒ intermittent?

- c. Does the treatment works land-apply treated wastewater?

- ☐
- Yes
- ☒
- No

If yes, provide the following for each land application site:

Location:

Number of acres:

Annual average daily volume applied to site: _____ mgd

Is land application ☐ continuous or ☐ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

- ☐
- Yes
- ☒
- No

FACILITY NAME AND PERMIT NUMBER: VA 0020702

Virginia Corr. Ct. for Women

Form Approved 1/14/99
OMB Number 2040-0086

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter Name _____

Mailing Address _____

Contact Person _____

Title _____

Telephone Number () _____

For each treatment works that receives this discharge, provide the following:

Name _____

Mailing Address _____

Contact Person _____

Title _____

Telephone Number () _____

If known, provide the NPDES permit number of the treatment works that receives this discharge _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____ mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8. through A.8.d above (e.g., underground percolation, well injection): ☐ Yes ☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed by this method: _____

Is disposal through this method ☐ continuous or ☐ intermittent?

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

- a. Outfall number 002
- b. Location James River (Middle) 23160
(City or town, if applicable) (Zip Code)
Goochland VA
(County) (State)
N 37.67066 N 37° 40' 14.4" W 77.8965 W 77° 53' 47.4"
(Latitude) (Longitude)
- c. Distance from shore (if applicable) Bank discharge ft.
- d. Depth below surface (if applicable) n/a ft.
- e. Average daily flow rate _____ mgd
- f. Does this outfall have either an intermittent or a periodic discharge?
☐ Yes ☒ No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: _____
- Average duration of each discharge: _____
- Average flow per discharge: _____ mgd
- Months in which discharge occurs: _____
- g. Is outfall equipped with a diffuser? ☐ Yes ☒ No

A.10. Description of Receiving Waters.

- a. Name of receiving water James River
- b. Name of watershed (if known) James River Basin
United States Soil Conservation Service 14-digit watershed code (if known): 02080205030H38
- c. Name of State Management/River Basin (if known): Department of Conservation and Recreation
United States Geological Survey 8-digit hydrologic cataloging unit code (if known): JM79
- d. Critical low flow of receiving stream (if applicable)
acute n/a cfs chronic n/a cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): n/a mg/l of CaCO₃

Virginia Corr. Ct. for Women

A.11. Description of Treatment.

- a. What levels of treatment are provided? Check all that apply.

☒ Primary☒ Secondary☐ Advanced☐ Other. Describe: _____

- b. Indicate the following removal rates (as applicable):

Design BOD5 removal or Design CBOD5 removal 95 %Design SS removal 85 %Design P removal n/a %Design N removal n/a %

Other _____ %

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe:

UV

If disinfection is by chlorination is dechlorination used for this outfall?

☐ Yes☐ No

- d. Does the treatment plant have post aeration?

☒ Yes☐ No

A.12 Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

| PARAMETER | MAXIMUM DAILY VALUE | | AVERAGE DAILY VALUE | | |
|----------------------|---------------------|-------|---------------------|-------|-------------------|
| | Value | Units | Value | Units | Number of Samples |
| pH (Minimum) | 6.3 | s.u. | | | |
| pH (Maximum) | 7.4 | s.u. | | | |
| Flow Rate | .276 | MGD | .175 | MGD | 3 |
| Temperature (Winter) | 17.1 | C | 15.2 | C | 3 |
| Temperature (Summer) | 29.1 | C | 26.3 | C | 3 |

* For pH please report a minimum and a maximum daily value

| POLLUTANT | MAXIMUM DAILY DISCHARGE | | AVERAGE DAILY DISCHARGE | | | ANALYTICAL METHOD | ML/MDL |
|-----------|-------------------------|-------|-------------------------|-------|-------------------|-------------------|--------|
| | Conc. | Units | Conc. | Units | Number of Samples | | |

CONVENTIONAL AND NON CONVENTIONAL COMPOUNDS

| | | | | | | | | |
|--|-------|------|-------|-----|-------|-----|---------|-----|
| BIOCHEMICAL OXYGEN DEMAND (Report one) | BOD5 | 8.2 | mg/l | <QL | mg/l | 3 | 5210 B | 2.0 |
| | CBOD5 | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| FECAL COLIFORM | | <2 | N/CML | <2 | N/CML | 3 | 9222B | 2.0 |
| TOTAL SUSPENDED SOLIDS (TSS) | | 9.10 | mg/l | 1.6 | mg/l | 3 | 25401 D | 0.5 |

**END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
2A YOU MUST COMPLETE**

Virginia Corr. Ct. for Women

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration

10,000 gallons per event

Briefly explain any steps underway or planned to minimize inflow and infiltration.

We are in the process of replacing piping and manholes to reduce inflow and infiltration.

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within $\frac{1}{4}$ mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where the hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ☐ Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

Telephone Number: () _____

Responsibilities of Contractor: _____

B.5. Scheduled improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

n/a

- b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

☐ Yes ☐ No

FACILITY NAME AND PERMIT NUMBER: VA 0020702

Form Approved 1/14/99
OMB Number 2040-0086

Virginia Corr. Ct. for Women

c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

| Implementation Stage | Schedule MM/DD/YYYY | Actual Completion MM/DD/YYYY |
|----------------------------|------------------------|---------------------------------|
| - Begin Construction | / / | / / |
| - End Construction | / / | / / |
| - Begin Discharge | / / | / / |
| - Attain Operational Level | / / | / / |

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly: _____

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide effluent testing for the following listed parameters and those required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum effluent testing data must be based on at least three pollutant scans, preferably represent several seasons, and must be no more than four and on-half years old.

Outfall Number: 001

| POLLUTANT | MAXIMUM DAILY DISCHARGE | | AVERAGE DAILY DISCHARGE | | | ANALYTICAL METHOD | ML/MDL |
|---|-------------------------|-------|-------------------------|-------|-------------------|-------------------|--------|
| | Conc. | Units | Conc. | Units | Number of Samples | | |
| CONVENTIONAL AND NON CONVENTIONAL COMPOUNDS | | | | | | | |
| AMMONIA (as N) | 6.01 | mg/l | 4.03 | mg/l | 3 | 350.1/R2.0 | |
| CHLORINE (TOTAL RESIDUAL, TRC) | ND | | ND | | 3 | DR100 | |
| DISSOLVED OXYGEN | 8.2 | mg/l | 7.21 | mg/l | 30 | YSI550A | |
| TOTAL KJELDAHL NITROGEN (TKN) | 7.20 | mg/l | 5.28 | mg/l | 3 | 351.2/R2.0 | |
| NITRATE PLUS NITRITE NITROGEN | <.10 | mg/l | <.10 | mg/l | 3 | SM18/4500N | |
| OIL and GREASE | <5.0 | mg/l | <5.0 | mg/l | 3 | EPA1664A | |
| PHOSPHORUS (Total) | 1.33 | mg/l | .83 | mg/l | 3 | SM18/4500PE | |
| TOTAL DISSOLVED SOLIDS (TDS) | 309 | mg/l | 295.3 | mg/l | 3 | SM18/2540C | |
| OTHER | - | - | - | - | - | - | - |

END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER: VA 0020702

Form Approved 1/14/99
OMB Number 2040-0086

Virginia Corr. Ct. for Women

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)

☐ Part E (Toxicity Testing: Biomonitoring Data)

☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

☐ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Tim Newton\ Environmental Services Unit Director

Signature 

Telephone number (804)887-8069

Date signed 12/6/13

Upon request of the permitting authority, you must submit any other information necessary to assure wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

<100DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY CRITERIA MONITORING

Effective January 1, 2012, all analyses shall be in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

A listing of Virginia Environmental Laboratory Accreditation Program (VELAP) certified and/or accredited laboratories can be found at the following website:
<http://www.dgs.state.va.us/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx>

Please be advised that additional water quality analyses may be necessary and/or required for permitting purposes.

| CASRN | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY |
|------------------------|--|------------------|-------------------------------------|-------------------|----------------------------|------------------|
| METALS | | | | | | |
| 7440-36-0 | Antimony, dissolved | (3) | 1.4 | <1.0 | G or C | 1/5 YR |
| 7440-38-2 | Arsenic, dissolved | (3) | 1.0 | <1.0 | G or C | 1/5 YR |
| 7440-39-3 | Barium, dissolved | (3) | 200 | <10 | G or C | 1/5 YR (PWS) |
| 7440-43-9 | Cadmium, dissolved | (3) | .30 | <0.05 | G or C | 1/5 YR |
| 16065-83-1 | Chromium III, dissolved ⁽⁶⁾ | (3) | 3.6 | <1.0 | G or C | 1/5 YR |
| 18540-29-9 | Chromium VI, dissolved ⁽⁶⁾ | (3) | 1.6 | <1.0 | G or C | 1/5 YR |
| 7440-50-8 | Copper, dissolved | (3) | 0.50 | <0.50 | G or C | 1/5 YR |
| 7439-89-6 | Iron, dissolved | (3) | 30 | <10 | G or C | 1/5 YR (PWS) |
| 7439-92-1 | Lead, dissolved | (3) | 0.50 | <.10 | G or C | 1/5 YR |
| 7439-96-5 | Manganese, dissolved | (3) | 5.0 | <5.0 | G or C | 1/5 YR (PWS) |
| 7439-97-6 | Mercury, dissolved | (3) | 1.0 | <.10 | G or C | 1/5 YR |
| 7440-02-0 | Nickel, dissolved | (3) | 0.94 | <.50 | G or C | 1/5 YR |
| 7782-49-2 | Selenium, Total Recoverable | (3) | 2.0 | <.50 | G or C | 1/5 YR (FW) |
| 7440-22-4 | Silver, dissolved | (3) | 0.20 | <.10 | G or C | 1/5 YR |
| 7440-28-0 | Thallium, dissolved | (3) | (4) | <.10 | G or C | 1/5 YR |
| 7440-66-6 | Zinc, dissolved | (3) | 3.6 | <1.0 | G or C | 1/5 YR |
| PESTICIDES/PCBs | | | | | | |
| 309-00-2 | Aldrin | 608/625 | 0.05 | <.05 | G or C | 1/5 YR |
| 57-74-9 | Chlordane | 608/625 | 0.2 | .20 | G or C | 1/5 YR |
| 2921-88-2 | Chlorpyrifos (synonym = Dursban) | 622 | (4) | <.10 | G or C | 1/5 YR |

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|------------|---|-------------------------------|-------------------------------------|-------------------|----------------------------|------------------|
| 72-54-8 | DDD | 608/625 | 0.1 | <.10 | G or C | 1/5 YR |
| 72-55-9 | DDE | 608/625 | 0.1 | <.10 | G or C | 1/5 YR |
| 50-29-3 | DDT | 608/625 | 0.1 | <.10 | G or C | 1/5 YR |
| 8065-48-3 | Demeton (synonym = Dementon-O,S) | 622 | (4) | <.10 | G or C | 1/5 YR |
| 333-41-5 | Diazinon | 622 | (4) | <.10 | G or C | 1/5 YR |
| 60-57-1 | Dieldrin | 608/625 | 0.1 | <.10 | G or C | 1/5 YR |
| 959-98-8 | Alpha-Endosulfan (synonym = Endosulfan I) | 608/625 | 0.1 | <.10 | G or C | 1/5 YR |
| 33213-65-9 | Beta-Endosulfan (synonym = Endosulfan II) | 608625 | 0.1 | <.10 | G or C | 1/5 YR |
| 1031-07-8 | Endosulfan Sulfate | 608/625 | 0.1 | <.10 | G or C | 1/5 YR |
| 72-20-8 | Endrin | 608/625 | 0.1 | <.10 | G or C | 1/5 YR |
| 7421-93-4 | Endrin Aldehyde | 608/625 | (4) | <.10 | G or C | 1/5 YR |
| 86-50-0 | Guthion (synonym = Azinphos Methyl) | 622 | (4) | <.10 | G or C | 1/5 YR |
| 76-44-8 | Heptachlor | 608/625 | 0.05 | <.05 | G or C | 1/5 YR |
| 1024-57-3 | Heptachlor Epoxide | 608/625 | (4) | <.10 | G or C | 1/5 YR |
| 319-84-6 | Hexachlorocyclohexane Alpha-BHC | 608/625 | (4) | <.10 | G or C | 1/5 YR |
| 319-85-7 | Hexachlorocyclohexane Beta-BHC | 608/625 | (4) | <.10 | G or C | 1/5 YR |
| 58-89-9 | Hexachlorocyclohexane Gamma-BHC (syn. = Lindane) | 608/625 | (4) | <.10 | G or C | 1/5 YR |
| 143-50-0 | Kepone | 8081 Extended/ 8270C/8270D | (4) | <.60 | G or C | 1/5 YR |
| 121-75-5 | Malathion | 614 | (4) | <1.0 | G or C | 1/5 YR |
| 72-43-5 | Methoxychlor | 608.2 | (4) | <.10 | G or C | 1/5 YR |
| 2385-85-5 | Mirex | 8081 Extended/ 8270C/8270D | (4) | <.10 | G or C | 1/5 YR |
| 56-38-2 | Parathion (synonym = Parathion Ethyl) | 614 | (4) | <1.0 | G or C | 1/5 YR |
| 1336-36-3 | PCB, total | 608/625 | 7.0 | <7.0 | G or C | 1/5 YR |
| 8001-35-2 | Toxaphene | 608/625 | 5.0 | <.50 | G or C | 1/5 YR |

BASE NEUTRAL EXTRACTABLES

| | | | | | | |
|----------|------------------------|---------|------|-----|--------|--------|
| 83-32-9 | Acenaphthene | 610/625 | 10.0 | <10 | G or C | 1/5 YR |
| 120-12-7 | Anthracene | 610/625 | 10.0 | <10 | G or C | 1/5 YR |
| 92-87-5 | Benzidine | 625 | (4) | <10 | G or C | 1/5 YR |
| 56-55-3 | Benzo (a) anthracene | 610/625 | 10.0 | <10 | G or C | 1/5 YR |
| 205-99-2 | Benzo (b) fluoranthene | 610/625 | 10.0 | <10 | G or C | 1/5 YR |

| CASRN | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY |
|----------|--|---------------------|-------------------------------------|-------------------|----------------------------|------------------|
| 207-08-9 | Benzo (k) fluoranthene | 610/625 | 10.0 | <10 | G or C | 1/5 YR |
| 50-32-8 | Benzo (a) pyrene | 610/625 | 10.0 | <10 | G or C | 1/5 YR |
| 111-44-4 | Bis 2-Chloroethyl Ether | 625 | (4) | <10 | G or C | 1/5 YR |
| 108-60-1 | Bis 2-Chloroisopropyl Ether | 625 | (4) | <10 | G or C | 1/5 YR |
| 117-81-7 | Bis 2-Ethylhexyl Phthalate (syn. = Di-2-Ethylhexyl Phthalate) | 625 | 10.0 | <10 | G or C | 1/5 YR |
| 85-68-7 | Butyl benzyl phthalate | 625 | 10.0 | <10 | G or C | 1/5 YR |
| 91-58-7 | 2-Chloronaphthalene | 625 | (4) | <10 | G or C | 1/5 YR |
| 218-01-9 | Chrysene | 610/625 | 10.0 | <10 | G or C | 1/5 YR |
| 53-70-3 | Dibenzo (a,h) anthracene | 610/625 | 20.0 | <10 | G or C | 1/5 YR |
| 95-50-1 | 1,2-Dichlorobenzene | 602/624 | 10.0 | <10 | G or C | 1/5 YR |
| 541-73-1 | 1,3-Dichlorobenzene | 602/624 | 10.0 | <10 | G or C | 1/5 YR |
| 106-46-7 | 1,4-Dichlorobenzene | 602/624 | 10.0 | <10 | G or C | 1/5 YR |
| 91-94-1 | 3,3-Dichlorobenzidine | 625 | (4) | <10 | G or C | 1/5 YR |
| 84-66-2 | Diethyl phthalate | 625 | 10.0 | <10 | G or C | 1/5 YR |
| 131-11-3 | Dimethyl phthalate | 625 | (4) | <10 | G or C | 1/5 YR |
| 84-74-2 | Di-n-butyl Phthalate (synonym = Dibutyl Phthalate) | 625 | 10.0 | <10 | G or C | 1/5 YR |
| 121-14-2 | 2,4-Dinitrotoluene | 625 | 10.0 | <10 | G or C | 1/5 YR |
| 122-66-7 | 1,2-Diphenylhydrazine | 625/ 8270C/8270D | (4) | <10 | G or C | 1/5 YR |
| 206-44-0 | Fluoranthene | 610/625 | 10.0 | <10 | G or C | 1/5 YR |
| 86-73-7 | Fluorene | 610/625 | 10.0 | <10 | G or C | 1/5 YR |
| 118-74-1 | Hexachlorobenzene | 625 | (4) | <10 | G or C | 1/5 YR |
| 87-68-3 | Hexachlorobutadiene | 625 | (4) | <10 | G or C | 1/5 YR |
| 77-47-4 | Hexachlorocyclopentadiene | 625 | (4) | <10 | G or C | 1/5 YR |
| 67-72-1 | Hexachloroethane | 625 | (4) | <10 | G or C | 1/5 YR |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 610/625 | 20.0 | <10 | G or C | 1/5 YR |
| 78-59-1 | Isophorone | 625 | 10.0 | <10 | G or C | 1/5 YR |
| 98-95-3 | Nitrobenzene | 625 | 10.0 | <10 | G or C | 1/5 YR |
| 62-75-9 | N-Nitrosodimethylamine | 625 | (4) | <10 | G or C | 1/5 YR |
| 621-64-7 | N-Nitrosodi-n-propylamine | 625 | (4) | <10 | G or C | 1/5 YR |
| 86-30-6 | N-Nitrosodiphenylamine | 625 | (4) | <10 | G or C | 1/5 YR |

| CASRN | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY |
|---------------|--|------------------|-------------------------------------|-------------------|----------------------------|------------------|
| 129-00-0 | Pyrene | 610/625 | 10.0 | <10 | G or C | 1/5 YR |
| 120-82-1 | 1,2,4-Trichlorobenzene | 625 | 10.0 | <10 | G or C | 1/5 YR |
| VOLATILES | | | | | | |
| 107-02-8 | Acrolein | 624 | (4) | <50 | G | 1/5 YR |
| 107-13-1 | Acrylonitrile | 624 | (4) | <10 | G | 1/5 YR |
| 71-43-2 | Benzene | 602/624 | 10.0 | <10 | G | 1/5 YR |
| 75-25-2 | Bromoform | 624 | 10.0 | <10 | G | 1/5 YR |
| 56-23-5 | Carbon Tetrachloride | 624 | 10.0 | <10 | G | 1/5 YR |
| 108-90-7 | Chlorobenzene (synonym = Monochlorobenzene) | 602/624 | 50.0 | <10 | G | 1/5 YR |
| 124-48-1 | Chlorodibromomethane | 624 | 10.0 | <10 | G | 1/5 YR |
| 67-66-3 | Chloroform | 624 | 10.0 | <10 | G | 1/5 YR |
| 75-27-4 | Dichlorobromomethane | 624 | 10.0 | <10 | G | 1/5 YR |
| 107-06-2 | 1,2-Dichloroethane | 624 | 10.0 | <10 | G | 1/5 YR |
| 75-35-4 | 1,1-Dichloroethylene | 624 | 10.0 | <10 | G | 1/5 YR |
| 156-60-5 | 1,2-trans-dichloroethylene | 624 | (4) | <10 | G | 1/5 YR |
| 78-87-5 | 1,2-Dichloropropane | 624 | (4) | <10 | G | 1/5 YR |
| 542-75-6 | 1,3-Dichloropropene | 624 | (4) | <20 | G | 1/5 YR |
| 100-41-4 | Ethylbenzene | 602/624 | 10.0 | <10 | G | 1/5 YR |
| 74-83-9 | Methyl Bromide (synonym = Bromomethane) | 624 | (4) | <10 | G | 1/5 YR |
| 75-09-2 | Methylene Chloride (synonym = Dichloromethane) | 624 | 20.0 | <10 | G | 1/5 YR |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 624 | (4) | <10 | G | 1/5 YR |
| 127-18-4 | Tetrachloroethylene (synonym = Tetrachloroethene) | 624 | 10.0 | <10 | G | 1/5 YR |
| 10-88-3 | Toluene | 602/624 | 10.0 | <10 | G | 1/5 YR |
| 79-00-5 | 1,1,2-Trichloroethane | 624 | (4) | <10 | G | 1/5 YR |
| 79-01-6 | Trichloroethylene (synonym = Trichloroethene) | 624 | 10.0 | <10 | G | 1/5 YR |
| 75-01-4 | Vinyl Chloride | 624 | 10.0 | <10 | G | 1/5 YR |
| RADIONUCLIDES | | | | | | |
| N/A | Beta Particle & Photon Activity (mrem/yr) | (3) | (4) | 11 | G or C | 1/5 YR (PWS) |
| N/A | Gross Alpha Particle Activity (pCi/L) | (3) | (4) | <.1 | G or C | 1/5 YR (PWS) |

| CASRN | CHEMICAL | EPA ANALYSIS NO. | QUANTIFICATION LEVEL ⁽¹⁾ | REPORTING RESULTS | SAMPLE TYPE ⁽²⁾ | SAMPLE FREQUENCY |
|-------------------|---|--------------------------|-------------------------------------|-------------------|----------------------------|---------------------|
| N/A | Combined Radium 226 and 228 | (3) | (4) | <1 | G or C | 1/5 YR (PWS) |
| N/A | Uranium | (3) | (4) | .249 | G or C | 1/5 YR (PWS) |
| ACID EXTRACTABLES | | | | | | |
| 95-57-8 | 2-Chlorophenol | 625 | 10.0 | <10 | G or C | 1/5 YR |
| 120-83-2 | 2,4 Dichlorophenol | 625 | 10.0 | <10 | G or C | 1/5 YR |
| 105-67-9 | 2,4 Dimethylphenol | 625 | 10.0 | <10 | G or C | 1/5 YR |
| 51-28-5 | 2,4-Dinitrophenol | 625 | (4) | <10 | G or C | 1/5 YR |
| 534-52-1 | 2-Methyl-4,6-Dinitrophenol | 625 | (4) | <10 | G or C | 1/5 YR |
| 25154-52-3 | Nonylphenol | ASTM D 7065-06 | (4) | <10 | G or C | 1/5 YR |
| 87-86-5 | Pentachlorophenol | 625 | 50.0 | <10 | G or C | 1/5 YR |
| 108-95-2 | Phenol | 625 | 10.0 | <10 | G or C | 1/5 YR |
| 86-06-2 | 2,4,6-Trichlorophenol | 625 | 10.0 | <10 | G or C | 1/5 YR |
| MISCELLANEOUS | | | | | | |
| 776-41-7 | Ammonia as NH ₃ -N | 350.1 | 200 | 121ug/l | C | 1/5 YR |
| 16887-00-6 | Chloride | (3) | (4) | 337ug/l | C | 1/5 YR (FW and PWS) |
| 7782-50-5 | Chlorine, Total Residual | (3) | 100 | ND | G | 1/5 YR |
| 57-12-5 | Cyanide, Free ⁽⁶⁾ | ASTM 4282-02 | 10.0 | <10ug/l | G | 1/5 YR |
| 94-75-7 | 2,4-Dichlorophenoxy acetic acid (synonym = 2,4-D) | 615 | (4) | <.2 | G or C | 1/5 YR (PWS) |
| N/A | <i>E. coli</i> / <i>Enterococcus</i> (N/CML) | (3) | (4) | <2 | G | 1/5 YR |
| N/A | Foaming Agents (as MBAS) | SM 5540 C | (4) | <1.0 | G | 1/5 YR (PWS) |
| 18496-25-8 | Sulfide, dissolved ⁽⁷⁾ | SM 4500 S ² B | 100 | <100ug/l | G or C | 1/5 YR |
| 14797-55-8 | Nitrate as N (mg/L) | (3) | (4) | <.05 | C | 1/5 YR (PWS) |
| N/A | Sulfate (mg/L) | (3) | (4) | 31.6 | C | 1/5 YR (PWS) |
| N/A | Total Dissolved Solids (mg/L) | (3) | (4) | 239 | C | 1/5 YR (PWS) |
| 60-10-5 | Tributyltin | (5) | (4) | <.03 | G or C | 1/5 YR |
| 93-72-1 | 2-(2,4,5-Trichlorophenoxy propionic acid (synonym = Silvex or 2,4,5-TP) | 615 | (4) | <.2 | G or C | 1/5 YR (PWS) |
| 471-34-1 | Hardness (mg/L as CaCO ₃) | (3) | (4) | 82.1 | G or C | 1/5 YR (FW & TZs) |

Timothy Newton Environmental Services Director
Name of Principal Executive Officer or Authorized Agent & Title

[Signature] 12/6/13
Signature of Principal Executive Officer or Authorized Agent & Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

- (1) Quantification level (QL) means the minimum levels, concentrations, or quantities of a target variable (e.g. target analyte) that can be reported with a specified degree of confidence in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information (i.e. laboratory certificates of analysis) shall be submitted to document that the required quantification level has been attained.

- (2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = An 8-hour composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

- (3) A specific analytical method is not specified; however, an appropriate method to meet the QL shall be selected from any approved method presented in 40 CFR Part 136.
- (4) The QL is at the discretion of the permittee. If the test result is less than the method QL, a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].
- (5) Analytical Methods: Analysis of Butyltins in Environmental Systems by the Virginia Institute of Marine Science, dated November 1996 (currently the only Virginia Environmental Laboratory Accreditation Program (VELAP) accredited method).

- (6) Both Chromium III and Chromium VI may be measured by the total chromium analysis. The total chromium analytical test QL shall be less than or equal to the lesser of the Chromium III or Chromium VI method QL listed above. If the result of the total chromium analysis is less than the analytical test QL, both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].
- (7) Dissolved sulfide may be measured by the total sulfide analysis. The total sulfide analytical test QL shall be less than or equal to the dissolved sulfide method QL listed above. If the result of the total sulfide analysis is less than the analytical test QL, dissolved sulfide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].
- (8) Free cyanide may be measured by the total cyanide analysis. The total cyanide analytical test QL shall be less than or equal to the free cyanide method QL listed above. If the result of the total cyanide analysis is less than the analytical test QL, free cyanide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

EPA FORM 3510-1 (8-90)

VII. SIC CODES (4-digit, in order of priority)

| A. FIRST | | | | | | | | | | B. SECOND | | | | | | | | | |
|------------------|---|----|----|----|-----------|-----------|----|----|----|-----------|-----------|----|----|----|----|--|--|--|--|
| C | 7 | 15 | 16 | 17 | 4952 | (specify) | 7 | 15 | 16 | 19 | (specify) | 7 | 15 | 16 | 19 | | | | |
| State of VA WWTP | | | | | | | | | | | | | | | | | | | |
| C. THIRD | | | | | | | | | | D. FOURTH | | | | | | | | | |
| C | 7 | 15 | 16 | 17 | (specify) | 7 | 15 | 16 | 19 | (specify) | 7 | 15 | 16 | 19 | | | | | |

VIII. OPERATOR INFORMATION

| A. NAME | | | | | | | | | | B. Is the name listed in Item VIII-A also the owner? | | | | | | | | | | |
|--|--|-----------|---------------------|--------------|---|-----------|---|----|----|--|---|-----|------|--|--|--|--|--|--|--|
| C | 8 | 18 | 19 | Randy Wilson | | | | | | | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | | | | | | | | | |
| C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other," specify.) | | | | | | | | | | D. PHONE (area code & no.) | | | | | | | | | | |
| F = FEDERAL | M = PUBLIC (other than federal or state) | S = STATE | O = OTHER (specify) | P = PRIVATE | S | (specify) | C | 15 | 16 | 18 | 804 | 556 | 7131 | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |

E. STREET OR PO BOX

1954 State Farm Road

| F. CITY OR TOWN | | | | | | | | | | G. STATE | | H. ZIP CODE | | IX. INDIAN LAND | |
|-----------------|----|----|----|------------|--|--|--|--|--|----------|----|-------------|----|-----------------|---|
| C | 15 | 16 | 40 | State Farm | | | | | | 42 | 42 | 47 | 51 | 23160 | Is the facility located on Indian lands? |
| B | | | | | | | | | | | | | | | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

X. EXISTING ENVIRONMENTAL PERMITS

| A. NPDES (Discharges to Surface Water) | | | | | | | | | | D. PSD (Air Emissions from Proposed Sources) | | | | | | | | | |
|--|---|----|----|----|----|----|------------|---|---|--|----|----|----|----|-----------|--|--|--|--|
| C | 9 | 15 | 16 | 17 | 18 | 30 | VA 0020702 | C | 9 | 15 | 16 | 17 | 18 | 30 | | | | | |
| T | N | | | | | | | | | | | | | | | | | | |
| B. UIC (Underground Injection of Fluids) | | | | | | | | | | E. OTHER (specify) | | | | | | | | | |
| C | 9 | 15 | 16 | 17 | 18 | 30 | | C | 9 | 15 | 16 | 17 | 18 | 30 | (Specify) | | | | |
| T | U | | | | | | | | | | | | | | | | | | |
| C. RCRA (Hazardous Wastes) | | | | | | | | | | E. OTHER (specify) | | | | | | | | | |
| C | 9 | 15 | 16 | 17 | 18 | 30 | | C | 9 | 15 | 16 | 17 | 18 | 30 | (Specify) | | | | |
| T | R | | | | | | | | | | | | | | | | | | |

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

Prison Facility for women.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| A. NAME & OFFICIAL TITLE (type or print) | | | | | | | | | | B. SIGNATURE | | | | | | | | | | C. DATE SIGNED | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------------|--|--|--|--|--|--|--|--|--|
| ESU Director Timothy Weaver | | | | | | | | | |  | | | | | | | | | | 12/6/13 | | | | | | | | | |

COMMENTS FOR OFFICIAL USE ONLY

| | | | |
|---|----|----|----|
| C | 15 | 16 | 55 |
|---|----|----|----|

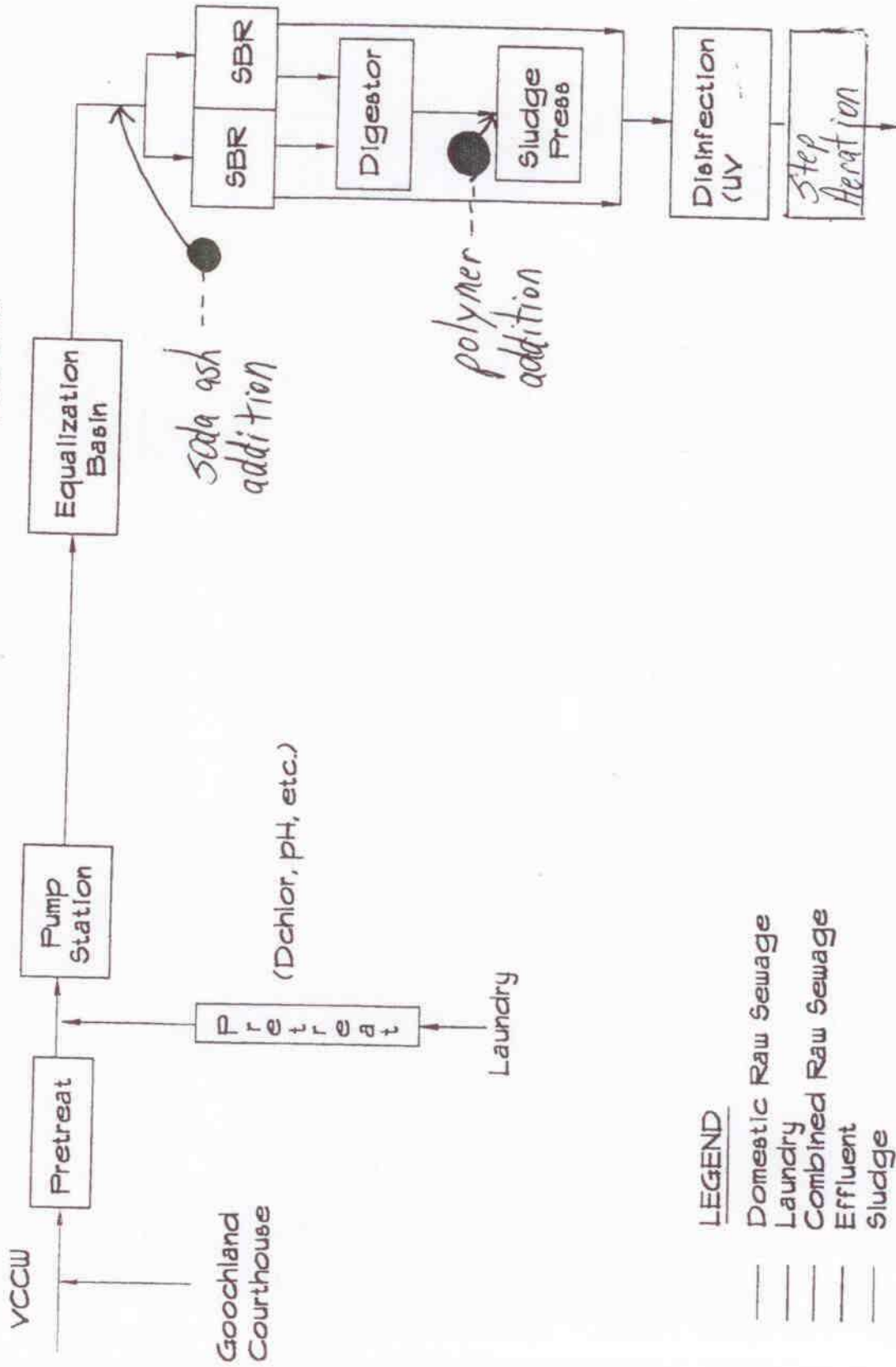
Plant Layout

DESIGN FLOW 400 MGD

1300

EXISTING SITE

NEW SITE

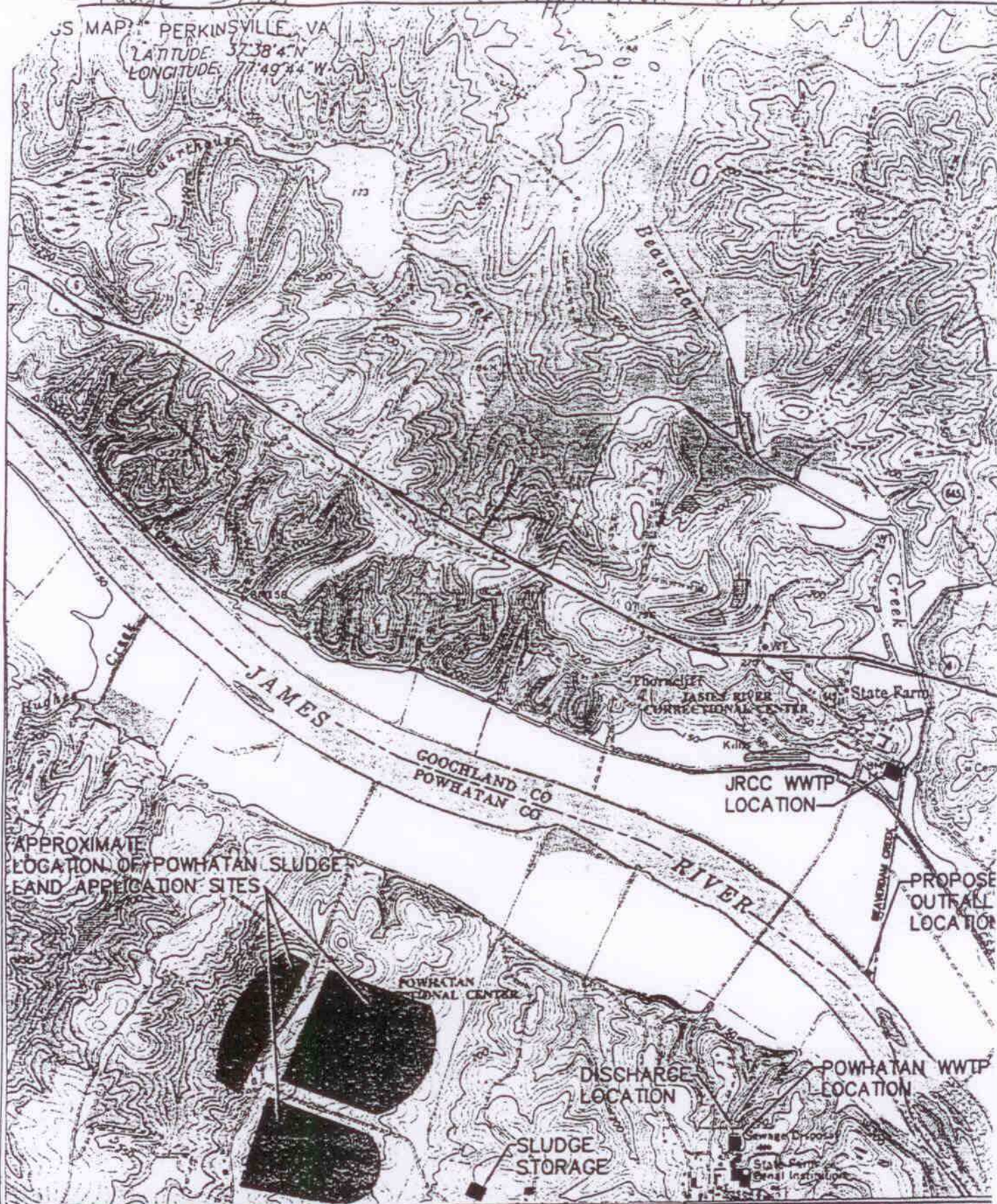


To James River
1/99

Sludge Intake

Land Application Sites

US MAP: PERKINSVILLE, VA
 LATITUDE: 37°38'4"N
 LONGITUDE: 77°49'44"W



APPROXIMATE
 LOCATION OF POWHATAN SLUDGE
 LAND APPLICATION SITES

JRCC WWTP
 LOCATION

PROPOSE
 OUTFALL
 LOCATION

POWATAN
 CORRECTIONAL CENTER

DISCHARGE
 LOCATION

POWATAN WWTP
 LOCATION

SLUDGE
 STORAGE



CIVIL ENGINEERS

CORPORATE HEADQUARTERS
 711 N. COURTHOUSE ROAD
 RICHMOND, VIRGINIA 23236-4099
 TELEPHONE: (804) 794-3500
 FAX: (804) 794-7839

JAMES RIVER CORRECTIONAL CENTER
 GOOCHLAND CO., VIRGINIA
 VICINITY MAP

DATE: 2/5/02

SCALE: 1" = 2000'

DRAWN BY: DTN

SHEET 1 OF 1

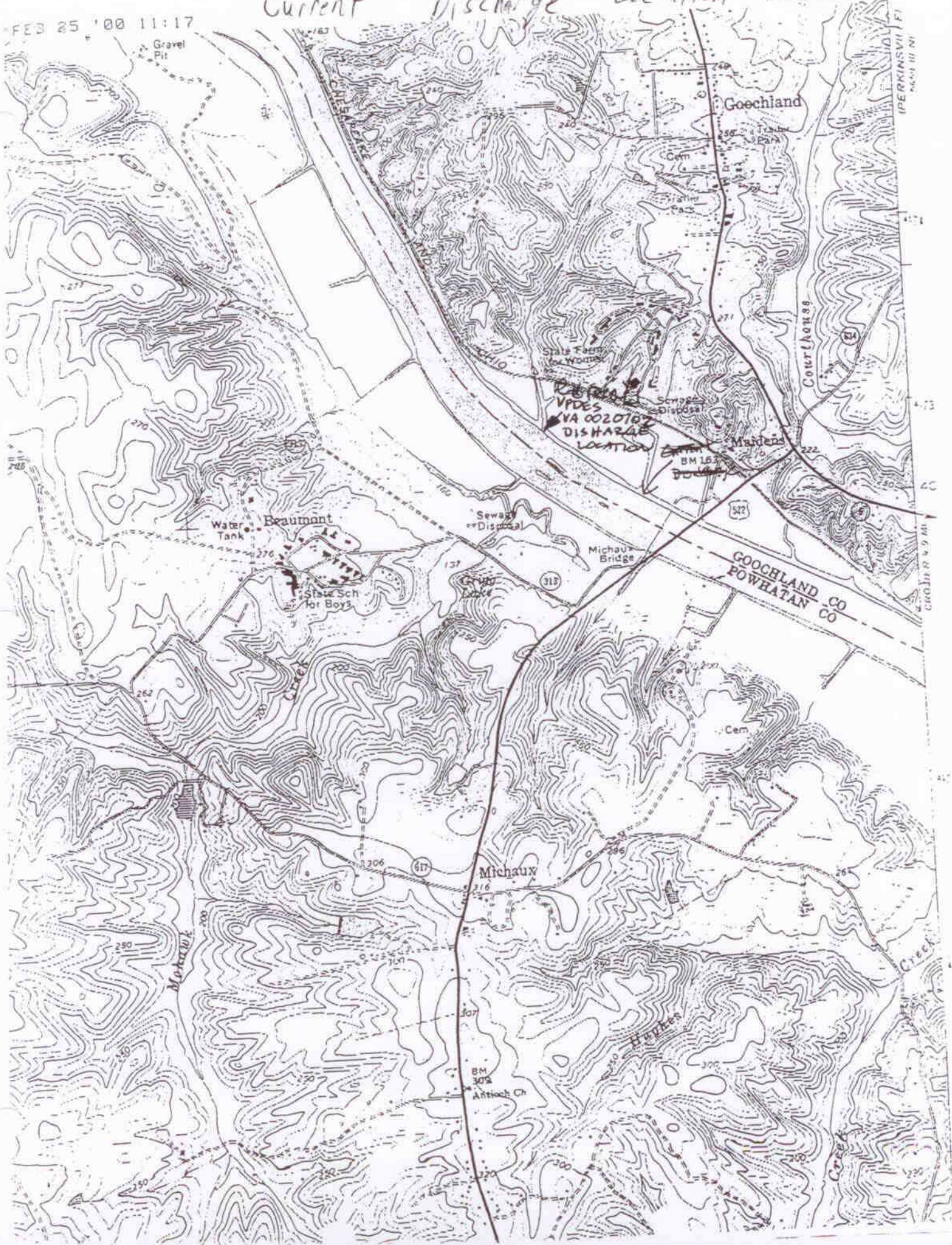
Current

Discharge

Location

PAGE 002

FEB 25 '00 11:17



VPDES Permit Application Addendum

1. Entity to whom the permit is to be issued: Virginia Department of Corrections

Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. Is this facility located within city or town boundaries? Yes ☐ No ☒

3. Provide the tax map parcel number for the land where the discharge is located. attached

4. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? none

5. What is the design average effluent flow of this facility? 0.300 MGD

For industrial facilities, provide the max. 30-day average production level, include units:

In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Yes ☐ No ☒

If "Yes", please identify the other flow tiers (in MGD) or production levels:

Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

6. Nature of operations generating wastewater:

100% Domestic flow

100 % of flow from domestic connections/sources

Number of private residences to be served by the treatment works: 0

% of flow from non-domestic connections/sources

7. Mode of discharge: ☐ Continuous ☒ Intermittent ☐ Seasonal

Describe frequency and duration of intermittent or seasonal discharges:

8. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:

X Permanent stream, never dry

Intermittent stream, usually flowing, sometimes dry

Ephemeral stream, wet-weather flow, often dry

Effluent-dependent stream, usually or always dry without effluent flow

Lake or pond at or below the discharge point

Other:

9. Approval Date(s):

O & M Manual 11/20/2007 Sludge/Solids Management Plan 1-1-2004

Have there been any changes in your operations or procedures since the above approval dates? Yes ☐ No ☒

FACILITY NAME: Virginia Correctional Ct for Women

VA 0020702
VPDES PERMIT NUMBER:

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Does this facility generate sewage sludge? ☒ Yes ☐ No

Does this facility derive a material from sewage sludge? ☐ Yes ☒ No

If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge).

3. Does this facility apply sewage sludge to the land? ☐ Yes ☒ No

Is sewage sludge from this facility applied to the land? ☒ Yes ☐ No

If you answer No to all above, skip Section C.

If you answered Yes to either, answer the following three questions:

a. Does the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 18, as identified in the instructions?
☐ Yes ☒ No

b. Is sewage sludge from this facility placed in a bag or other container for sale or giveaway for application to the land? ☐ Yes ☒ No

c. Is sewage sludge from this facility sent to another facility for treatment or blending? ☒ Yes ☐ No

If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

If you answered Yes to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? ☐ Yes ☒ No

If Yes, complete Section D (Surface Disposal).

FACILITY NAME: Virginia Correctional Ct for Women
SECTION A. GENERAL INFORMATION

VA0020702
VPDES PERMIT NUMBER:

All applicants must complete this section.

1. Facility Information.

- a. Facility name: Virginia Correctional Center for Women
- b. Contact person: Randy Wilson
Title: Environmental Services Unit Supervisor
Phone: (804) 556-7131
- c. Mailing address:
Street or P.O. Box: 1954 State Farm Road
City or Town: State Farm State: VA Zip: 23160
- d. Facility location:
Street or Route #: Route 6
County: Goochland
City or Town: Goochland State: VA Zip: 23160
- e. Is this facility a Class I sludge management facility? Yes ☒ No
- f. Facility design flow rate: .300 mgd
- g. Total population served: 1685
- h. Indicate the type of facility:
☒ X Publicly owned treatment works (POTW)
☐ Privately owned treatment works
☐ Federally owned treatment works
☐ Blending or treatment operation
☐ Surface disposal site
☒ X Other (describe): State Owned

2. Applicant Information. If the applicant is different from the above, provide the following:

- a. Applicant name: Virginia Department of Corrections
- b. Mailing address:
Street or P.O. Box: 6900 Atmore Drive
City or Town: Richmond State: VA Zip: 23235
- c. Contact person:
Title: Timothy Newton
Phone: (434) 887-8069
- d. Is the applicant the owner or operator (or both) of this facility?
☒ X owner ☒ X operator
- d. Should correspondence regarding this permit be directed to the facility or the applicant?
☐ facility ☒ X applicant

3. Permit Information.

- a. Facility's VPDES permit number (if applicable): VA 0020702
- b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:
Permit Number: VA0020699 Type of Permit: VPDES - Powhatan WWTP Sludge Disposal Permit

4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? Yes ☒ No If yes, describe:

FACILITY NAME: Virginia Correctional Ct. for Women

VPDES PERMIT NUMBER:

5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:

- Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
- Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.

6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction. **Aerobically digest sludge for 28 days, use belt press for dewatering, add lime in storage shed for stabilization and commingle before land application.**

7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? Yes X No
If yes, provide the following for each contractor (attach additional pages if necessary).

Name:

Mailing address:

Street or P.O. Box:

City or Town: _____ State: _____ Zip: _____

Phone: () _____

Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:

If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).

8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

| POLLUTANT | CONCENTRATION (mg/kg dry weight) | SAMPLE DATE | ANALYTICAL METHOD | DETECTION LEVEL FOR ANALYSIS |
|------------|-------------------------------------|----------------|----------------------|---------------------------------|
| Arsenic | 1.82 | 3-13-2013 | SW6010B | 1.79 |
| Cadmium | <1.79 | 3-13-2013 | SW6010B | 1.79 |
| Chromium | 9.13 | 2-24-2-13 | SW6010B | 1.79 |
| Copper | 228 | 3-13-2013 | SW6010B | 1.79 |
| Lead | 2.97 | 3-13-2013 | SW6010B | 1.79 |
| Mercury | 0.318 | 3-13-2013 | SW7471A | 0.029 |
| Molybdenum | <8.93 | 3-13-2013 | SW6010B | 8.93 |
| Nickel | 10.3 | 3-13-2013 | SW6010B | 1.79 |
| Selenium | <8.93 | 3-13-2013 | SW6010B | 8.93 |
| Zinc | 166 | 3-13-2013 | SW6010B | 1.79 |

9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:

X Section A (General Information)

X Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)

X Section C (Land Application of Bulk Sewage Sludge)

FACILITY NAME: Virginia Correctional Ct for Women
Section D (Surface Disposal)

VA 0020702
VPDES PERMIT NUMBER:

FACILITY NAME: Virginia Corr. Ct for Women

VPDES PERMIT NUMBER:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Tim Newton /ESU DirectorSignature  Date Signed 12/6/13Telephone number 804-887-8069

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

FACILITY NAME:

VCCW

VA 0020702
VPDES PERMIT NUMBER:

**SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION
OF A MATERIAL DERIVED FROM SEWAGE SLUDGE**

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. Amount Generated On Site.
Total dry metric tons per 365-day period generated at your facility: 30 dry metric tons
2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.
 - a. Facility name:
 - b. Contact Person:
Title:
Phone ()
 - c. Mailing address:
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
 - d. Facility Address:
(not P.O. Box)
 - e. Total dry metric tons per 365-day period received from this facility: _____ dry metric tons
 - f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:
3. Treatment Provided at Your Facility.
 - a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?
Class A ☒ Class B ☐ Neither or unknown
 - b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Aerobic digestion for 38% reduction of volatile solids.
 - c. Which vector attraction reduction option is met for the sewage sludge at your facility?
☒ Option 1 (Minimum 38 percent reduction in volatile solids)
☐ Option 2 (Anaerobic process, with bench-scale demonstration)
☐ Option 3 (Aerobic process, with bench-scale demonstration)
☐ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
☐ Option 5 (Aerobic processes plus raised temperature)
☒ Option 6 (Raise pH to 12 and retain at 11.5)
☐ Option 7 (75 percent solids with no unstabilized solids)
☐ Option 8 (90 percent solids with unstabilized solids)
☐ None or unknown
 - d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: Blended with lime and stabilization at sludge holding facility.
 - e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: N/A
4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge).
(If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)
 - a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:
n/a dry metric tons

FACILITY NAME:

VCC W

VA0020702
VPDES PERMIT NUMBER:

- b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?
Yes X No

i. Sale or Give-Away in a Bag or Other Container for Application to the Land.

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

- a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: n/a dry metric tons
- b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

6. Shipment Off Site for Treatment or Blending.

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

- a. Receiving facility name: Powhatan Correctional Center
- b. Facility contact: Randy Wilson
Title: Environmental Services Unit Supervisor
Phone: (804) 784-3551 Ext. 2299
- c. Mailing address:
Street or P.O. Box: State Farm
City or Town: State Farm State: VA Zip: 23160
- d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: 30 dry metric tons
- e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:
Permit Number: VA 0020699 Type of Permit: VPDES Permit
- f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? X Yes No
Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?
 Class A X Class B Neither or unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge: Add lime to stabilize and blend.
- g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? X Yes No
Which vector attraction reduction option is met for the sewage sludge at the receiving facility?
 Option 1 (Minimum 38 percent reduction in volatile solids)
 Option 2 (Anaerobic process, with bench-scale demonstration)
 X Option 3 (Aerobic process, with bench-scale demonstration)
 Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
 Option 5 (Aerobic processes plus raised temperature)
 X Option 6 (Raise pH to 12 and retain at 11.5)
 Option 7 (75 percent solids with no unstabilized solids)
 Option 8 (90 percent solids with unstabilized solids)
 None unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge: Add lime to stabilize and commingle before land application.
- h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?
 Yes X No
If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:

FACILITY NAME: VCCW

VA 0020702
VPDES PERMIT NUMBER:

- Attached.

7. Land Application of Bulk Sewage Sludge.

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6; complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

- ed in Questions 4, 5 or
Total sent to Parks
sites: 149 dry

8. Surface Disposal.

(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)

- 1/4 All state owned land.
No land owners bordering application sites

FACILITY NAME: VCCW

VPDES PERMIT NUMBER: VAC0020702

9. Incineration.

(Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)

- a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: n/a dry metric tons
- b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?
☐ Yes ☐ No
 If no, answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.
- c. Incinerator name or number:
- d. Contact person:
 Title:
 Phone: ()
 Contact is: ☐ Incinerator Owner ☐ Incinerator Operator
- e. Mailing address.
 Street or P.O. Box:
 City or Town: _____ State: _____ Zip: _____
- f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: _____ dry metric tons
- g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing of sewage sludge at this incinerator:
 Permit Number: _____ Type of Permit: _____

10. Disposal in a Municipal Solid Waste Landfill.

(Complete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.)

- a. Landfill name: n/a
- b. Contact person:
 Title:
 Phone: ()
 Contact is: ☐ Landfill Owner ☐ Landfill Operator
- c. Mailing address.
 Street or P.O. Box:
 City or Town: _____ State: _____ Zip: _____
- d. Landfill location.
 Street or Route #:
 County:
 City or Town: _____ State: _____ Zip: _____
- e. Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:
 _____ dry metric tons
- f. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the operation of this municipal solid waste landfill:
 Permit Number: _____ Type of Permit: _____

- g. Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?
☐ Yes ☐ No
- h. Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq.? ☐ Yes ☐ No
- i. Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill be watertight and covered? ☐ Yes ☐ No
 Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the week and time of the day sewage sludge will be transported.

PUBLIC NOTICE BILLING INFORMATION

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in Goochland Gazette in accordance with 9 VAC 25-31-290.C.2.

Agent/Department to be billed: Timothy G. Newton

Owner: Virginia Department of Corrections

Agent/Department Address: 6900 Atmore Drive

Richmond, VA 23225

Agent's Telephone No.: 804-887-8069

Printed Name: Timothy G. Newton

Authorizing Agent – Signature: 

Date: 12/6/13

VPDES Permit No. VA0020702

Facility Name Virginia Correctional Center for Women



My Notes

B: 23160, VA

Trip: 3.5 mi, 4 min



FREE! Use **Live Search 411** to find movies, businesses & more: **800-CALL-411**.



Goochland, VA

A-B: 3.5 mi
4 min

1. Depart **US-522 / River Rd W**

1.0 mi



2. Keep straight onto SR-6 / River Rd W

2.5 mi



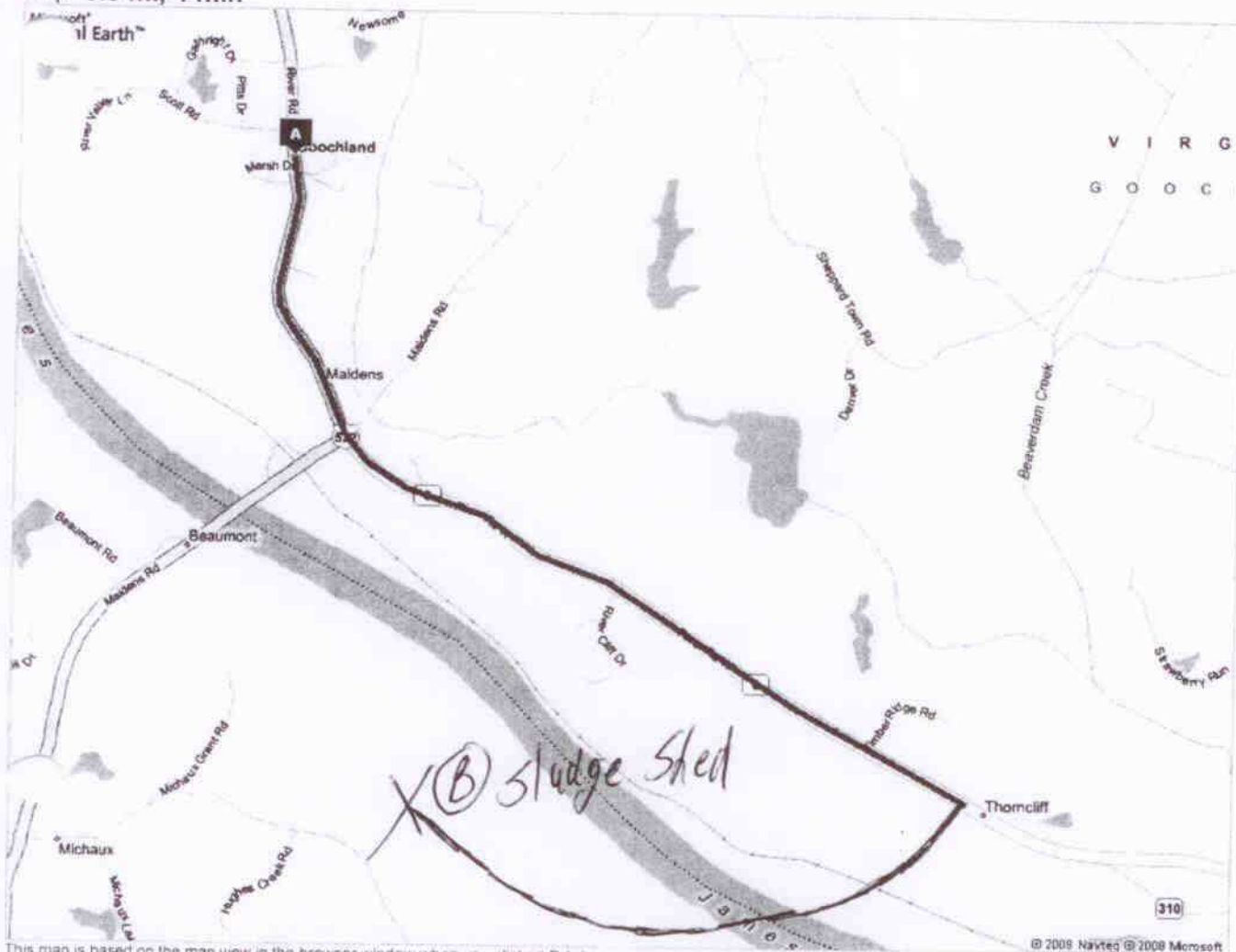
3. Arrive at **23160, VA** on the right

The last intersection is Timber Ridge Rd

If you reach SR-310 / State Farm Rd, you've gone too far

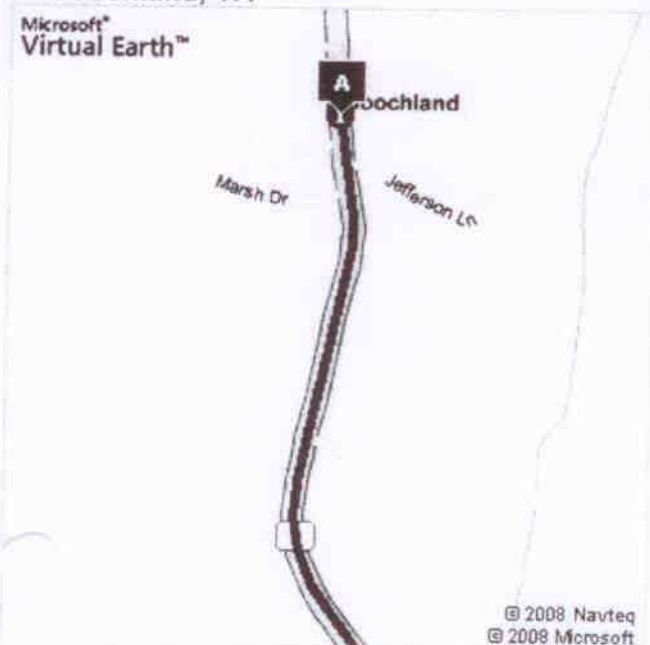
These directions are subject to the Microsoft Live Search Terms of Use and for informational purposes only. No guarantee is made regarding their completeness or accuracy. Construction projects, traffic, or other events may cause actual conditions to differ from these results. Map and traffic data © 2008 NAVTEQ™ AND™

Trip: 3.5 mi, 4 min



This map is based on the map view in the browser window when you clicked Print.

A: Goochland, VA



B: 23160, VA

